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# Primary ureteroscopy versus emergency stenting and delayed ureteroscopy: Is there a winner?

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Management of Kidney stone disease (KSD) is expensive with a cost that equals the combined cost of prostate and bladder cancer [1]. With the COVID-19 pandemic, substantial delays have occurred in the management of patients with KSD [2]. While repercussions of this will be felt for a number of years, efforts must be made to minimise this by embracing telemedicine and virtual stone clinics, primary ureteroscopy, stent on strings and procedures under local anaesthesia [3, 4, 5]. In this study the authors look at the cost of primary ureteroscopy (P-URS) versus initial stenting and delayed ureteroscopy (D-URS) [6]. In their paper the authors compare outcomes of 138 URS procedures of which 38 underwent P-URS and 112 had emergency stents (ES) and D-URS. The duration of stay, number of days off work and complications were all higher in the D-URS group. On comparison, the cost of P-URS and D-URS were €4450 and €5900 with cost due to loss of work at €300 and €450 respectively. These are not taking into account the cost associated with stent related symptoms (SRS) which inevitably would also lead to pain, readmissions and loss of work.

A previous prospective study on P-URS vs D-URS comparing 235 and 132 patients showed comparable

stone free rate (SFR) and complications between the groups [4]. Although the cost of KSD has increased, a recent systematic review shows that URS is more cost effective than shockwave lithotripsy (SWL) [7]. Cost of URS can be variable, and this depends on the cost of laser fiber, reusable or disposable scopes and ancillary equipment used [8]. It can also vary based on the volume of procedures performed and the contract between the hospital and the companies.

While there is a thrust towards day-case P-URS and telemedicine, clinicians must not forget the effect KSD can have on patient quality of life (QoL) which is particularly affected by the presence of a ureteric stent [9, 10]. All efforts must be made to shorten the stent dwell time and unlike a D-URS, a P-URS does not need a pre-operative stent in majority of patients [4]. Perhaps more need to be done to support acute URS when patients present initially with ureteric stones, which can be achieved by performing these as 'HOT' ureteroscopy procedures. This not only saves cost but is also beneficial for patients who avoid having a second general anaesthetic procedure and possibly a better QoL due to avoidance of SRS from D-URS. It seems that primary ureteroscopy is a winner especially in the hands of trained endourologists.

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#### **CONFLICTS OF INTEREST**

The authors declare no conflicts of interest.

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## References .....

- Geraghty R, Cook P, Walker V, Somani BK. Evaluation of economic burden of kidney stone disease in the UK: A retrospective cohort study. BJUI. 2020; 125: 586-194.
- Ho HC, Hughes T, Bozlu M, Kadıoğlu A, Somani BK. What do urologists need to know: Diagnosis, treatment, and follow-up during COVID-19 pandemic. Turk J Urol. 2020; 46: 169-177.
- 3. Hughes T, Pietropaolo A, Archer M,
  Davis T, Tear L, Somani BK. Lessons
  learnt (clinical outcomes and cost savings)
  from Virtual Stone Clinic (VSC) and their
  application in the era post Covid-19:
  Prospective outcomes over a 6-year
  period from a University Teaching
  Hospital. J Endourol. 2020 Aug 14.
  doi: 10.1089/end.2020.0708
  [Online ahead of print].
- McKay A, Somani BK, Pietropaolo A, et al. Comparison of primary and delayed ureteroscopy for ureteric stones: A prospective non-randomised comparative study. Urol Int. 2021; 105: 90-94.
- Oliver R, Wells H, Traxer O, et al. Ureteric stents on extraction strings: A systematic review of literature. Urolithiasis. 2018; 46: 129-136.
- Wani M, Burki J, Melhem M, Gilani S, Ghumman F, Masood S. Is primary ureteroscopy an alternative to emergency stenting in terms of quality and cost? Cent European J Urol. 2021 [Epub ahead of print]
- 7. Geraghty R, Jones P, Herrmann T, Aboumarzouk O, Somani B. Ureteroscopy seems to be clinically and financially

- more cost effective than shock wave lithotripsy for stone treatment: Systematic review and Meta-analysis. WJU. 2018; 36: 1783-1793.
- Somani BK, Robertson A, Kata SG. Decreasing cost of Flexible ureterorenoscopic procedures: Cost volume relationship. Urology. 2011; 78: 528-530.
- Ghosh A, Oliver R, Way C, White L, Somani BK. Results of day-case ureterorenoscopy (DC-URS) for stone disease: Prospective outcomes over 4.5 years. World J Urol. 2017; 35: 1757-1764.
- 10. New F, Somani BK. A complete world literature review of quality of life (QOL) in patients with kidney stone disease (KSD). Curr Urol Rep. 2016; 17: 88.